

Bachelorthesis / Masterthesis

Smart Factories in China – Challenges and opportunities for electric motor production



Initial situation:

The term Industry 4.0 stands for the fourth industrial revolution: After the steam machine, the conveyor belt and IT, the focus is now on so-called "Smart Factories". These are based on intelligent, digitally networked systems that enable a largely self-organized and highly efficient production.

These Smart Factories include for example subareas like cyber-physical systems, powerful information and communication technology, big-data technologies, embedded systems for controlling and monitoring the production process, cloud computing, flexible and intelligent logistics systems and wireless communication technologies (such as radio frequency identification).

A major problem, however, is to use these subareas that are suitable for a particular company in order to derive the greatest possible benefit from them.

Your task:

In the context of your thesis, the overall task is to weigh up the challenges and opportunities of Smart Factories in China against each other and transfer them to electric motor production.

In a first step, a literature research on existing and planned Smart Factories in China will be conducted. The focus is on companies in the automotive sector.

In a second step, the extent to which the methods and concepts currently used in the Smart Factories can be applied to electric motor production will be determined.

Your requirements:

- Studies in mechanical/industrial engineering (or comparable)
- Interest in electric mobility
- High motivation and commitment
- High communication skills
- Great commitment
- Very good language skills in German or English

Our offer:

- Comprehensive support
- Delimited task, fast introduction possible
- Expert insight into the automotive industry
- Publication in the course of a bachelor or master thesis possible

Are you interested?

Please send a short letter of motivation and a current excerpt of your grades as well as your curriculum vitae and certificates to the e-mail address below.

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